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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/227,398	01/08/1999	KENT K. LEUNG	CISCP077	8362
22434	7590	06/03/2005	EXAMINER	
BEYER WEAVER & THOMAS LLP P.O. BOX 70250 OAKLAND, CA 94612-0250			MEHRPOUR, NAGHMEH	
			ART UNIT	PAPER NUMBER
			2686	

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/277,398

Applicant(s)

ELSHOURBAGY ET AL.

Examiner

Naghmeh Mehrpour

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 03 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4,7,12-14,18,22-29,36-45 and 47-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,7,12-14,18,22-29,36-45 and 47-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-4, 7, 12-14, 18, 22-26, 32, 37-38, 41-45, 47-55,** are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al (US Publication Number 2002/0186688 A1) in view of Grob et al. (US Patent 6,894,994 B1).

Regarding **Claims 1, 3, 13, 23, 37, 43**, Inoue teaches a network device which supports mobile IP is configured to send an accounting request, the accounting request identifying a mobile node, the network device comprising:

a memory (page 2 section 20);

a processor coupled to the memory, wherein the network device and plurality of mobile nodes each of the plurality of network devices a Home Agent or a Foreign Agent adapted for sending an accounting request to the server being a Home Agent or a Foreign Agent adapted for sending an accounting request to the server associated with a mobile node supported by a plurality of Home Agents (page 2 section 20), and each of the plurality of network devices a Home Agent or a Foreign Agent sending information, the network device adapted for sending the accounting request to a server in response to a trigger event identifying the mobile node

Art Unit: 2686

initiation or termination of a registration of the mobile node, the trigger event including the counter associated with the mobile's node's activity during **Mobile IP** a session, the trigger being a lapse of a predetermined period of time and wherein the server is not a Home agent or a foreign agent (page 6 section 0111, page 7 section 0114). Inoue fails to teach wherein the server configured to maintain accounting information for a plurality of mobile supported by a plurality of network devices, the accounting information being received from the plurality of network devices, each of plurality of network devices being a Home Agent or a foreign agent supporting mobile IP wherein the server is not a Home agent or a foreign agent. However, Grob the server configured to maintain accounting information for a plurality of mobile supported by a plurality of network devices, the accounting information being received from the plurality of network devices, each of plurality of network devices being a Home Agent or a foreign agent supporting mobile IP wherein the server is not a Home agent or a foreign agent users only pay for the cost of connecting to corporate remote access, the server to update accounting information associated with a mobile node (col 5 lines 52-67, col 6 lines 1-17). Therefore, it would have been obvious to the ordinary skill in the art at the time the invention was made to combine the above teaching of Grob with Inoue, in order to provides call related processing for one or more MPTs.

Regarding **Claims 2, 25, 29**, Inoue teaches a network device received and send packets by the mobile node, and each of the plurality of network devices a Home agent sending information to the server to update, a counter that counts a total service time for the mobile node (page 6 sections 0110, 0111).

Art Unit: 2686

Regarding **Claims 4, 14, 28, 38**, Inoue fails to teach server that is adapted for sending an accounting reply to the network device in response to the accounting request, and accounting reply acknowledging logging of the accounting information pertaining to the mobile node. However, Grob teaches teach server that is adapted for sending an accounting reply to the network device in response to the accounting request, and accounting reply acknowledging logging of the accounting information pertaining to the mobile node (col 11 lines 50-67, col 12 lines 30). Therefore, it would have been obvious to the ordinary skill in the art at the time the invention was made to combine the above teaching of Grob with Inoue, in order to provides call related processing for one or more MPTs.

Regarding **Claims 7, 18, 32, 41, 45**, Inoue teaches a server wherein the counter indicates a number of registrations that have been accepted (page 10 section 0156).

Regarding **Claims 12, 22, 48, 52**, Inoue fails to teach a server wherein the server is a RADIUS server. However, Grob teaches a server wherein the server is a RADIUS serve (col 6 lines 3-18). Therefore, it would have been obvious to the ordinary skill in the art at the time the invention was made to combine the above teaching of Grob with Inoue, in order to provides call related processing for one or more MPTs.

Regarding **Claims 24, 26**, Inoue teaches a method further including forwarding the data packet to another network device (page 4 sections 0048-0049).

Art Unit: 2686

Regarding **Claims 42, 44**, Inoue teaches a Network device wherein the accounting request further includes a value associated with the counter (page 6 section 0114)

Regarding **Claims 49-51**, Inoue fails to teach a network wherein the server is a AAA server and accounting request is sent in accordance with a AAA server protocol. However Grob teaches a network wherein the server is a AAA server and accounting request is sent in accordance with a AAA server protocol (col 23 lines 30-60).

Regarding **Claims 53-55**, Inoue modified by Grob fails to teach the network device wherein the server does not support Mobile IP. However the Examiner takes official notice a network wherein does not support Mobile IP node, is well known in the art. Therefore, it would have been obvious to the ordinary skill in the art at the time the invention was made to combine the above teaching of with Inoue modified by Grob, in order to enable the corporate users accessing network from home or while on the road, while the end users only pay for the cost of connecting to corporate remote access.

3. **Claims 27-28, 36, 39-40, 56**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Short et al. (US Patent 6, 636,894 B1) in view of Inoue et al (US Publication 2002/0186688 A1).

Regarding **Claims 27, 39**, Short teaches computer-readable medium that does not support IP, the AAA server configured to maintain accounting information for a plurality of mobile supported

Art Unit: 2686

by a plurality of network devices, the accounting information being received from the plurality of network devices, each of plurality of network devices being a Home Agent or a foreign agent supporting mobile IP (col 9 lines 5-25), a method of updating accounting information for a mobile node operating according to Mobile IP protocol (col lines 53-56) comprising:

receiving a request packet from a network device operating under Mobile IP Protocol, the request packet being sent in accordance with a AAA server protocol (col 5 lines 15-30), the request packet identifying the mobile node and including at least one counter associated with accounting information pertaining to mobile node (col 11 lines 51-64), a total service time for the mobile node, indicating at least one of a number of packets that have been sent from the mobile node, a total time for the mobile node (col 10 lines 20-40), number of bytes that have been sent to the mobile node and a number of bytes that been sent from the mobile node (col 10 lines 20-40); and

instructions logging the accounting information for the mobile node identified in the request packet using the at least one counter of the request packet (col 11 lines 44-60).

Short fails to teach that the network device being a Home Agent or foreign Agent supporting the mobile node. However Inoue teaches a communication system wherein Mobile IP standard are commonly referred to as a foreign agent (FA) (page 4 sections 0047-0048). Therefore, it would have been obvious to the ordinary skill in the art at the time the invention was made to combine the above teaching of Inoue with Short, in order to provide low cost deployment, ease of maintenance and ability to degrade gracefully under heavy load condition.

Art Unit: 2686

Regarding **Claims 28, 40**, Short teaches a that is adapted for sending an accounting reply to the network device in response to the accounting request (col 8 lines 31-42), and accounting reply acknowledging logging of the accounting information pertaining to the mobile node (col 10 lines 20-40).

Regarding **Claim 56**, Short teaches a method wherein the server is not a Home Agent or a Foreign Agent (col 5 lines 15-30).

4. **Claim 29**, is rejected under 35 U.S.C. 103(a) as being unpatentable over Short et al. (US Patent 6, 636,894 B1) in view of Inoue et al (US Publication 2002/0186688 A1) in further view of Grob et al. (US Patent 6,894,994 B1).

Regarding **Claim 29**, Short modify by Inoue fails to teach a method further comprising: generating a bill for Mobile IP service from the accounting information. However, Grob teaches to teach a method further comprising: generating a bill for Mobile IP service from the accounting information (col 9). Therefore, it would have been obvious to the ordinary skill in the art at the time the invention was made to combine the above teaching of Grob with Short modified by Inoue, in order to provides call related processing for one or more MPTs.

***Response to Arguments***

5. Applicant's arguments with respect to claims 1/3/05 have been considered but are moot in view of the new grounds of rejection.



*Conclusion*

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naghmeh Mehrpour whose telephone number is 703-308-7159. The examiner can normally be reached on 8:00- 6:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold be reached (703) 305-4379.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NM

May 26, 2005



MELODY MEHRPOUR  
PATENT EXAMINER